# memorandum

Idaho Operations Office

Date: November 15, 2002

Subject: Idaho Operations Office Workforce Analysis and Staffing Report

(TS-OSD-02-115)

To: Roy J. Schepens, Chair

Federal Technical Capability Panel

Office of River Protection DOE-RL, Bldg. 2440STVCN

As requested by the Federal Technical Capability Panel (FTCP), the Department of Energy-Idaho Operations Office (DOE-ID) is submitting updated site specific tables from Appendix A of the January 2002 report, Analysis of Safety Systems Federal Staff Expertise and an updated list of DOE-ID's Safety System Subject Matter Experts for all (Defense Nuclear Facilities Safety Board and non- Defense Nuclear Facilities Safety Board facilities) of the Idaho National Engineering and Environmental Laboratory vital safety systems.

As indicated by the tables no staffing gaps presently exist at DOE-ID.

If you need any additional information, please contact me, at (208) 526-1850.

Terry W. Smith

FTCP Agent, DOE-ID

### **Attachments**

cc: Robert W. Poe, DOE-OR Craig West, DOE-HQ Susan Coleman, DOE-RL

### Table A10 – EM Technical Capability by Site and Safety System Category (EM)

### DOE-ID # of VSS's & FTE's Required/Available

		FTE's	FTE's
System Category	# of Sys.	Required	<u>Available</u>
Confinement Ventilation	3	0.15	0.15
Fire Protection	8	0.4	0.4
Electrical	1	0.04	0.04
Radiation Monitoring	3	0.1	0.1
Hoist & Crane	1	0.14	0.14
Process	2	0.1	0.1
Communication	0	0	0
Gas & Air	0	0	0
<u>Other</u>	<u>131</u>	<u>6.1</u>	<u>6.1</u>
Totals 22	149	7	7

Table A12 - Summary of Needs: EM-ID

System Category Confinement Vent Fire Protection Electrical	# of Sys. 3	0 0 0 M	0.05 0	0.1 0.04	0 0 1/0	0 0 Crit	ChE/PrE 0 0	0 0 FP	0 0 0	o o o R	C/SE 0	0 0 0 0	Total 0.15 0.4 0.04
Electrical	<u> </u>	0	0	0.04	0	0	0	0	0	0	0	0	_
Radiation Monitoring	ω	0	0	0	0	0	0	0	0	0.1	0	0	0.1
Hoist & Cranes	<b>-</b>	0	0.14	0	0	0	0	0	0	0	0	0	_
Process	2	0	0	0	0	0	0.1	0	0	0	0	0	,
Communication	0	0	0	0	0	0	0	0	0	0	0	0	0
Gas & Air	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	131	<b>4</b> .1	0	0	0	2	0	0	0	0	0	0	6.1
Total	149												7.03

Note: The top number for each system is the number of available staff and the bottom (non-shaded) number is the number of staff needed.

# Radioactive Waste Management Complex (RWMC)

Number	Safety System	System SME
1	RTR Shielding	Paul Contreras
2	RTR Interlocks	Paul Contreras
3	RTR Visual/Audible Warning Signals and Emergency Switches	Paul Contreras
4	WSF, WMF-610 and -618 Fire Suppression Systems	Paul Contreras
5	Fire Alarm System	Paul Contreras
6	Drum Vent Containment Silo	Paul Contreras
7	Silo Fume Hood and Gantry Restraint System	Paul Contreras
8	Silo Ventilation System	Paul Contreras
9	Conveyor Disconnect Switch 83-Gallon Drum Recovery System	Paul Contreras
10	Drum Vent Facility Door Interlocks	Paul Contreras
11	Silo Fume Hood	Paul Contreras
12	Liquid Absorbent Containment Silo	Paul Contreras
13	CAMs	Paul Contreras
14	Drum Recovery Tent	Paul Contreras
15	Fence and Substantial Vehicle Barrier Surrounding 30,000 Gallon Propane Tank	Paul Contreras
16	30,000 Gallon Propane Tank Leak Prevention System	Paul Contreras
17	30, 000 Gallon Propane Tank Over Pressure System	Paul Contreras
18	30,000 Gallon Propane Tank Fire Deluge System	Paul Contreras
19	Propane Detection and Alarm in SWEPP	Paul Contreras

# Power Burst Facility (PBF)

Number	Safety System	System SME
1	PBF Building High-Bay Structure, Crane, and Canal Walls and Floor	Christian Natoni
2	Crane Bridge	Christian Natoni
3	PBF Canal Temporary Fuel Storage Racks	Christian Natoni
4	PBF Fuel Canisters	Christian Natoni
5	PBF Fuel Rods	Christian Natoni
6	PBF Fuel Transfer/Storage Buckets	Christian Natoni
7	PBF Fuel Transfer/Storage Bucket Stand	Christian Natoni
8	Turnover Fixture	Christian Natoni
9	HFEF-6 Cask	Christian Natoni
10	HFEF-6 Cask Stand	Christian Natoni

**Advanced Test Reactor (ATR)** 

Number	Safety System	System SME
1	Emergency Firewater Injection System	Bob Boston
2	PCS Overpressure Relief System	Bob Boston
3	Radiation Monitoring and Seal System	Bob Boston
4	Vessel Vent System (VVS)	Bob Boston
5	LOCA Primary Coolant Pump Shutoff System	Bob Boston
6	Reactor Shutdown System (RSS)	Bob Boston
7	Safety Rod System	Bob Boston
8	Buildings, Miscellaneous Structures and Components	Bob Boston
9	Control Complex	Bob Boston
10	Electrical Power Supply	Bob Boston
.11	Firewater System	Bob Boston
12	Fuel Storage and Handling	Bob Boston
13	Low-Pressure Demineralized Water System (LDW)	Bob Boston
14	Primary Coolant System (PCS)	Bob Boston
15	Reactivity Control System	Bob Boston
16	Reactor Core Internals	Bob Boston

**ATR Critical (ATRC) Facility** 

Number	Safety System	System SME
1	Reactor Core and Internals	Bob Boston
2	Reactor Shutdown System	Bob Boston
3	ATRC Canal Structure	Bob Boston
4	Fuel Storage and Handling Systems	Bob Boston
5	ATRC Control Complex	Bob Boston

Materials Test Reactor (MTR) Canal & Plug Storage Holes 1 & 2

Number	Safety System	System SME
	None (facility being downgraded)	

Nuclear Materials Inspection & Storage (NMIS) Facility

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Number	Safety System	System SME		
1	Criticality Alarm System	Bob Boston		
2	Fuel Storage Racks	Bob Boston		
3	Fuel Storage Rack Trays	Bob Boston		
4	Halon Fire Protection System	Bob Boston		
5	Facility Exterior Structure Shielding	Bob Boston		

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### **Test Reactor Area (TRA) Hot Cells**

Number	Safety System	System SME
1	Hot Cell Walls	Julie Conner
2	Penetration Plugs	Julie Conner
3	Hot Cell Windows/Doors	Julie Conner

### Materials Test Reactor (MTR) Vessel Structure

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Number	Safety System	System SME
	and the file	
	None	

### **Test Area North Operations (TANO)**

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Number	Safety System	System SME
1	Shielding Walls/Doors/Windows/Void Filler Material (e.g., steel shot) – Hot Shop/Hot Cell/SES Room	Mike Schultz
2	REA-2023 Cask and Inserts	Mike Schultz
3	TMI-2 6-Pack Module Support Structure	Mike Schultz
4	TMI-2 Canisters	Mike Schultz
5	TMI-2 Canister Lift Cage	Mike Schultz
6	NuPac 125B-3 Non-Poisoned Insert	Mike Schultz
7	NuPac 125B-1 and –2 Poisoned Inner Container  Vessel	Mike Schultz
8	NuPac 125B-1, -2, -3 Outer Casks	Mike Schultz
9	TNP-24P Cask	Mike Schultz
10	CASTOR V/21 Cask	Mike Schultz
11	MC-10 Cask	Mike Schultz
12	VSC-17 Cask	Mike Schultz
13	TMI Abnormal Waste Storage Pad (TAN-790)	Mike Schultz
14	Spent Fuel Storage Cask Testing Pad (TAN-791)	Mike Schultz

### Special Manufacturing Capability (SMC) Production Facilities

Number	Safety System	System SME
	None	
	Note	

INTEC Calcined Solid Storage Facilities (CSSF)

Number	Safety System	System Engineer
1	First CSSF Storage Vault Structure	Arnie Preece
2	Second, Third, Fourth, & Fifth CSSF Storage Vault Structures	Arnie Preece
3	Sixth CSSF Bins	Arnie Preece
4	Sixth CSSF Storage Vault Structure	Arnie Preece

### **INTEC Underground Fuel Storage Facility**

Number	Safety System	System SME
1	Fuel Packages	Craig Enos
2	Cask Centering Device	Craig Enos
3	Fuel Storage Vault Shielding Plugs	Craig Enos
4	Lower Lift Rods and Retaining Mechanism	Craig Enos

### **INTEC Experimental Facilities**

Number	Safety System	System SME
	None (facility being downgraded)	

### INTEC Fluorinel Dissolution & Fuel Storage (FAST) Facility (FSA)

Number	Safety System	System SME
1	FSA Pool Structures	Craig Enos
2	FSA Building Above Ground Structures	Craig Enos
3	Fuel Storage Racks and Rack Array Features	Craig Enos
4	Criticality Barriers	Craig Enos
5	Fuel Storage Devices	Craig Enos
6	Fuel Packaging Equipment	Craig Enos
7	Water Treatment Area Enclosure Structures	Craig Enos
8	Fuel Handling Crane and Associated Fuel Handling Tools	Craig Enos

# INTEC Fluorinel Dissolution & Fuel Storage (FAST) Facility (FDP)

Number	Safety System	System SME
1	FDP Cell Shielding Structures	Craig Enos
2	Waste Transfer Box	Craig Enos

**INTEC Fuel Processing Facility** 

Number	Safety System	System SME
1	Process Cell Shielding Structures	Arnie Preece

### **INTEC Tank Farm Facilities**

Number	Safety System	System SME
1	Storage Tanks WM-180 through WM-190	Arnie Preece
2	Vaults for Storage Tanks WM-180 through WM-190	Arnie Preece
3	Air Purge Flow Instruments	Arnie Preece

# **INTEC Headend Processing Plant**

Number	Safety System	System SME
1	Cell 5 Shielding Walls and Ceiling	Arnie Preece

### INTEC Process Equipment Waste Systems (PEW)

Number	Safety System	System SME
1	PEW System Cell Shield Walls	Arnie Preece
2	PEW Evaporator Group I Instruments	Arnie Preece
3	Shielding Walls for Deep Tanks	Arnie Preece

# **INTEC Irradiated Fuel Storage Facility (IFSF)**

Number	Safety System	System SME
1	IFSF Building Structures (Excluding cask receiving area structures)	Craig Enos
2	Fuel Storage Area, Fuel Handling Cave, and Crane Maintenance Area Shielding Components	Craig Enos
3	Fuel Storage Area, Fuel Handling Cave, and Crane Maintenance Area Wall and Penetrations	Craig Enos
4	Fuel Storage Racks	Craig Enos
5	Cask Transfer Car and Associate Transfer Equipment	Craig Enos
6	Fuel Storage Devices	Craig Enos
7	Fuel Handling Cave and Cask Receiving Area Criticality Alarm System	Craig Enos
8	Fuel Conditioning Station Heater Emergency Cutoff Circuit	Craig Enos
9	Fuel Conditioning Station Temperature Monitoring	Craig Enos

	System	
10	Berm Located Around Fuel Storage Area Ventilation	Craig Enos
	Supply Duct	

# **INTEC Remote Analytical Laboratory**

Number	Safety System	System SME
1	Analytical and Waste Handling Cell Shielding Structures	Arnie Preece

### **INTEC Unirradiated Fuel Storage Facility**

Number	Safety System	System SME
1	Criticality Alarm System	Craig Enos
2	Firewater Removal	Craig Enos
3	Facility Walls and Roof Structures	Craig Enos
4	Outer Walls and North Berm	Craig Enos
5	Fuel Storage Equipment	Craig Enos
6	Automatic Non aqueous Fire Suppression System for the South Vault	Craig Enos
7	Secured Lids on Powdered Fuel Containers	Craig Enos

### **INTEC Laboratory Facilities**

Number	Safety System	System SME
1	Criticality Alarm System	Arnie Preece

# **INTEC Underwater Fuel Receiving & Storage Facility**

Number	Safety System	System SME
	None (facility being downgraded)	

## **INTEC New Waste Calcining Facility**

Number	Safety System	System SME
1	NWCF Process Off-Gas System	Arnie Preece
2	Building Ventilation system	Arnie Preece
3	Process Instrumentation	Arnie Preece
4	Process Cells	Arnie Preece

5	Stack Monitor	Arnie Preece
6	Rapid Shutdown System	Arnie Preece

### **INEEL TRANSPORATION SYSTEMS**

**INTEC Calcined Sample Storage Casks** 

Number	Safety System	System SME
1	Calcine Sample Storage Cask Structure	Arnie Preece

### **INTEC CONT-YDC-900**

Number	Safety System	System SME
}	1 Year 1 1	
1	CONT-YDC-900 Container	Craig Enos

INTEC STR Charger

Number	Safety System	System SME
1	TBD	Craig Enos

**INTEC High Load Charger** 

Number	Safety System	System SME
1	TBD	Craig Enos

### Peach Bottom Cask

Number	Safety System	System SME
1	Peach Bottom Cask	Craig Enos
2	IFSF Fuel Storage Canister Over pack	Craig Enos
3	LWBR Storage Liner	Craig Enos
4	IFSF Fuel Storage Canister	Craig Enos
5	Peach Bottom Basket	Craig Enos
6	Peach Bottom Canister with Liner	Craig Enos
7	FRR TRIGA Fuel Bucket	Craig Enos
8	Five-Position Standard TRIGA Fuel Can	Craig Enos
9	IFSF Fuel Storage Canister Gap Plug	Craig Enos

### **TN-REG and TN-BRP Cask**

Number	Safety System	System SME
1	Railcar Derailer	Craig Enos
2	Cask Containment System	Craig Enos
3	Fuel Support Structures	Craig Enos
4	Cask Impact Limiters	Craig Enos
5	Cask Shielding	Craig Enos

### NAC-LWT Cask

Number	Safety System	System SME
1	TBD	Craig Enos

### **NFS-100**

Number	Safety System	System SME
1	TBD	Craig Enos

### ATR Cask

Number	Safety System	System SME
1	ATR Spent Fuel Transfer Cask	Bob Boston
2	ATR Spent Fuel Element Transfer Cask Divider	Bob Boston

### Large Cell Cask

Number	Safety System	System SME
1	TBD	Craig Enos

**HFEF-6 Cask** 

Number	Safety System	System SME
1	HFEF-6 Cask With Low Profile Lid	Craig Enos
2	MTR Canal Fuel Cans	Craig Enos